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Patent Application

of

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and

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for

DEVICE FOR DAMPING WATER HAMMER

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Specification
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Field of the Invention

The present invention relates to a device for damping water hammer in hydraulic accumulators, piston-type accumulators in particular. A component of the accumulator acts as a throttle on the flow of fluid established between parts of the interior of the accumulator and a hydraulic network to which the accumulator may be connected. The throttle is formed by at least one transfer area of a specifiable cross-section in a valve component. When in one of its valve positions, the valve interrupts the flow of fluid up to the respective transfer area. In its other valve position, the valve essentially releases the flow of fluid.

Background of the Invention

Hydraulic accumulators are readily available commercially in a plurality of embodiments. The essential applications of such hydraulic accumulators are in energy storage, emergency operation, oil leakage compensation, and in energy accumulation and pulsation damping. The most frequently encountered structural forms of hydraulic accumulators are ones with a separating member. A distinction is made between bladder accumulators, diaphragm accumulators, and piston accumulators, as a function of the separating member employed. The